



State Reservoir Priority and Development Program

PRESENTED BY
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Red River Compact Commission Meeting

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MWH

BUILDING A BETTER WORLD

Why Would Louisiana Need a Reservoir Development Program?

Water Resources in Louisiana

- Water is abundant and concerns about supply were typically low

Rapid demand growth for economic development

- Pulp and Paper
- Merchant Power Plants
- Shale Gas Development
- Other



*Atlanta, GA.
It can't happen here?*

A Severe Drought in 1998 - 2000 Raised Awareness



- Saltwater encroachment accelerated
- Ground water levels continued to decline
- Economic growth concerns grew

The State Legislature Acted

- Received requests to fund reservoir projects
- **No formal evaluation** or **prioritization** of projects to determine best use of state funds
- Recognized need for **process** and **procedures** to prioritize and fund reservoirs
- 2007 authorized DOTD to develop a program to prioritize statewide investment in reservoirs

Objectives of the Reservoir Priority Development Program

- Establish procedures
 - Applying for state funds
 - Evaluating applications
 - Providing a prioritized list to the Legislature for funding
- Apply established successful approaches
 - Highway and Port Priority Program
 - Flood Control Program
- Provide information and raise awareness about state-wide water resources issues

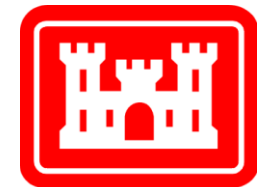
RPDP Goals

- Encourage Multiple Purpose Projects
 - Select projects that promote State priorities
 - Water supply, flood control, environmental enhancement, socioeconomic development, recreation, etc.

- Provide Tools for Applicants and Decision Makers
 - Consistent summary of state-wide water resource issues
 - Sound scientific criteria for decisions
 - Build on similar approaches from other agencies and states

- Provide Guidance on State Water Resource Management Strategies

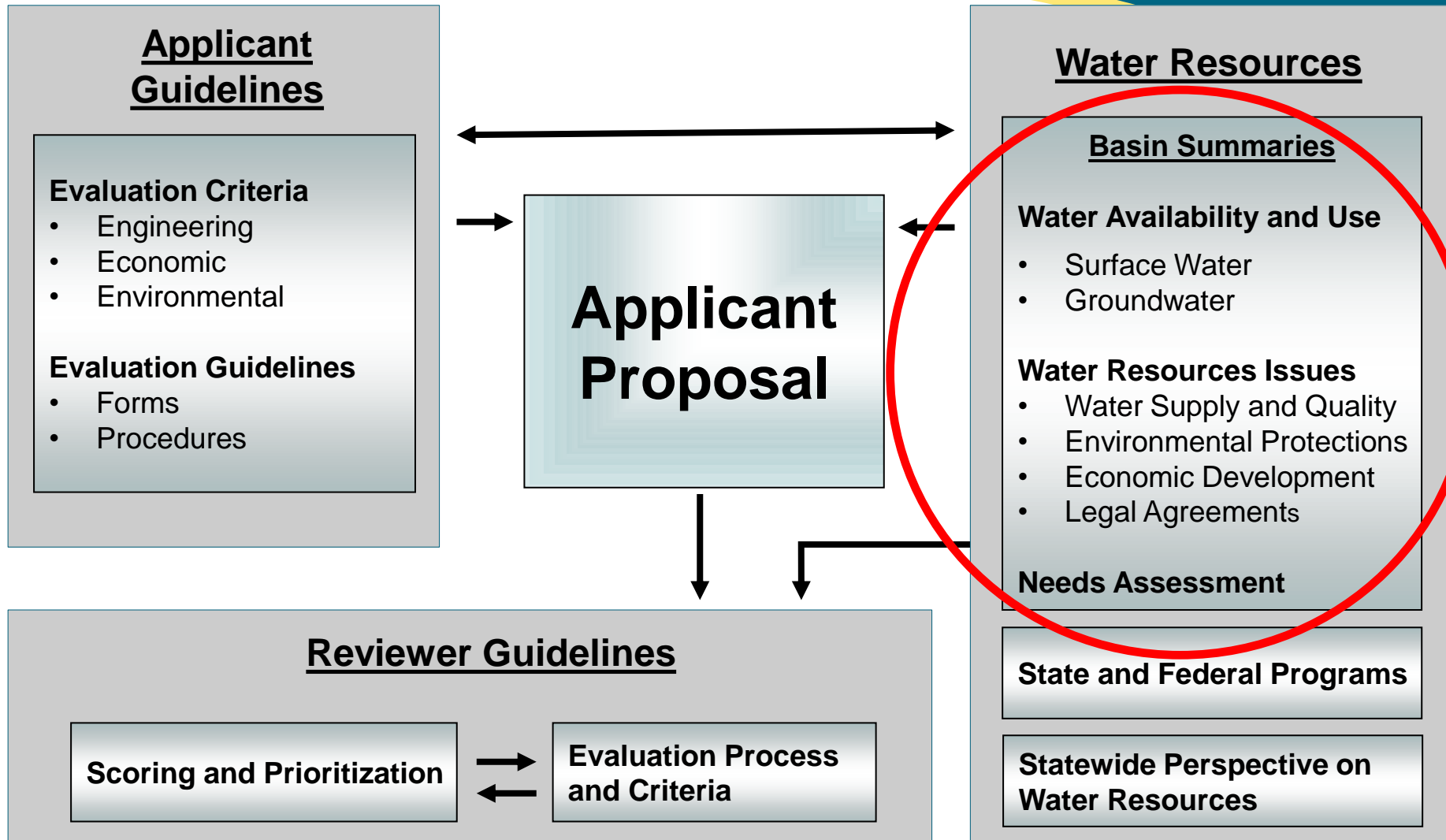
Participating Agencies



**US Army Corps
of Engineers®**



Reservoir Priority Development Program Approach



Basin Characterization Reports Provide Consistent Information Statewide

➤ Water Availability and Use

- Surface Water
- Groundwater

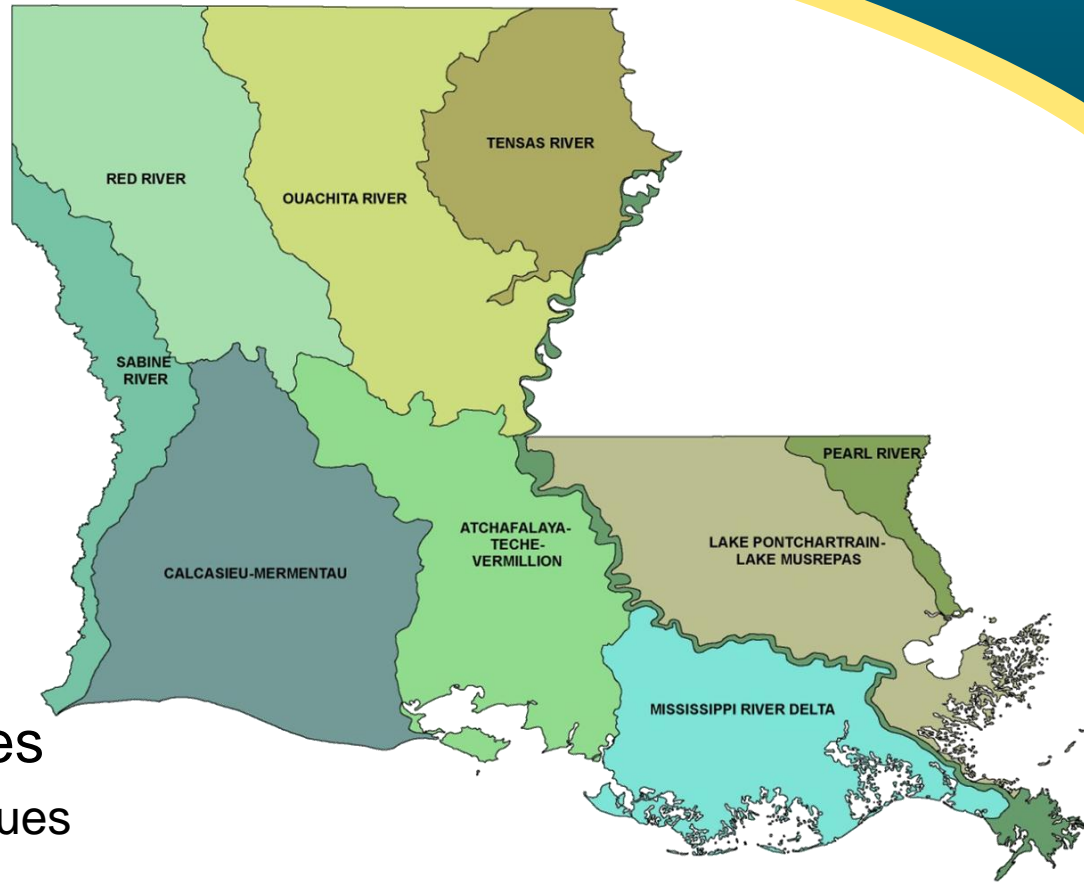
➤ Water Related Issues

- Water quality
- Groundwater Overdraft
- Environmental and Cultural
- Flooding
- Recreation
- Navigation
- Hydropower

➤ Land Use and Legal Entities

- Inter-basin and Inter-state Issues

➤ Needs Assessment

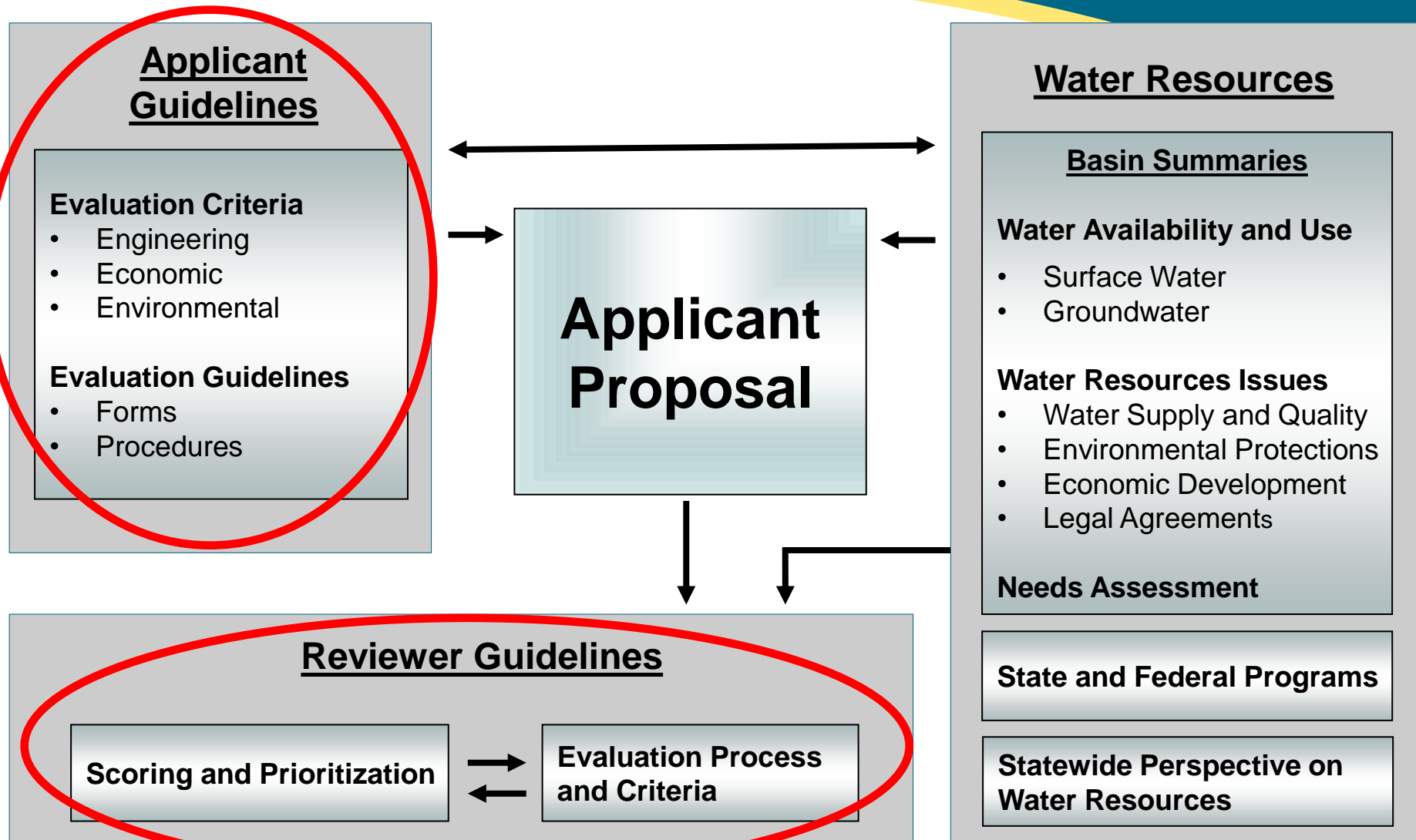


Water Resources Needs Were Ranked Based on Relative Urgency

Major water resource needs within each basin

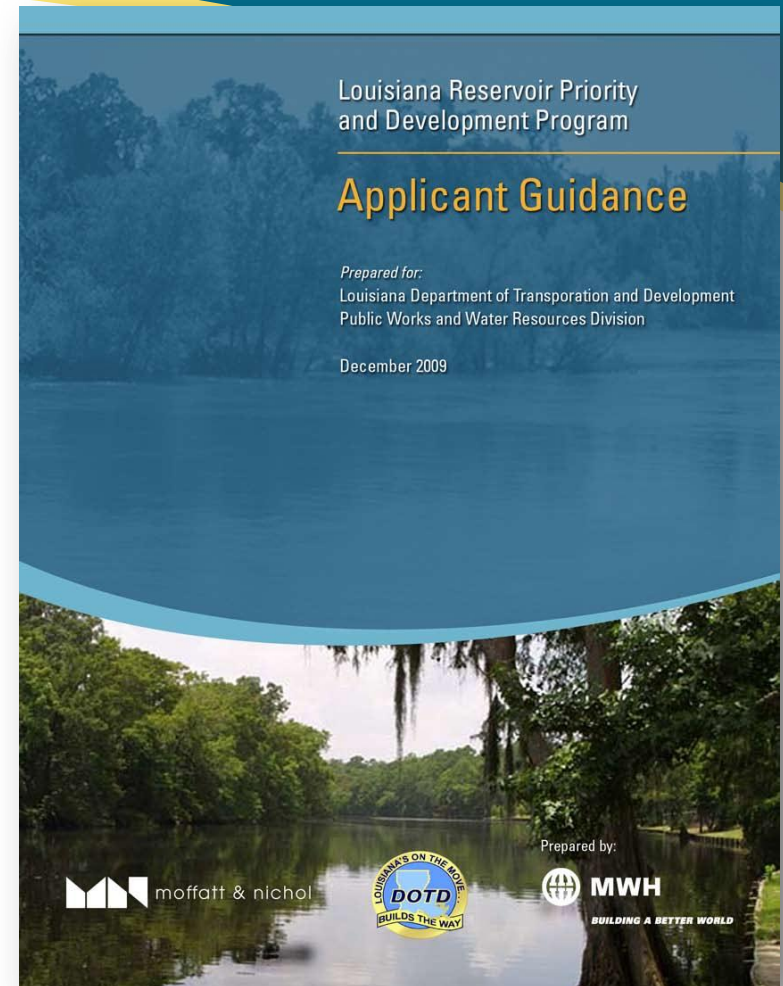
- Surface water supply / quality
- Ground water supply / quality
- Environmental protection / enhancement
- Flood control / recreation / navigation

Reservoir Priority Development Program Approach

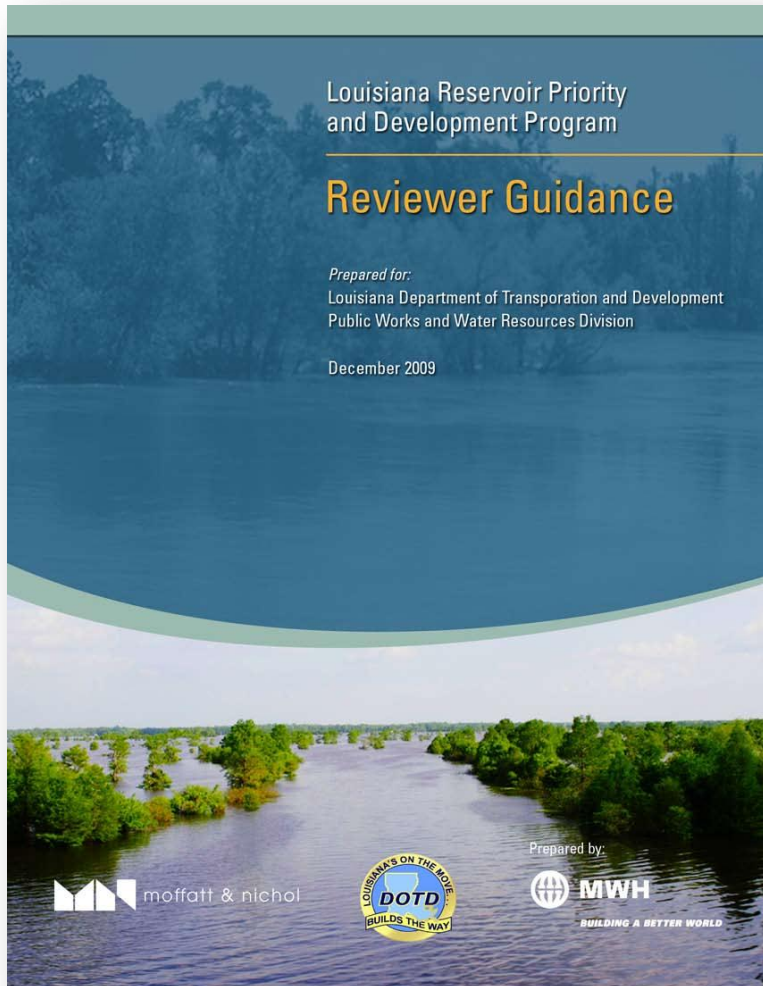


Applicant Guidance

- Procedures and Schedules
- Instructions for Applicants
- Application Forms
- Sample Cost and Benefit Calculations
- Two Phases



Reviewer Guidance



- Program Background
- Evaluation and Scoring Guidance
- Information on Permitting Requirements
- Review Worksheets

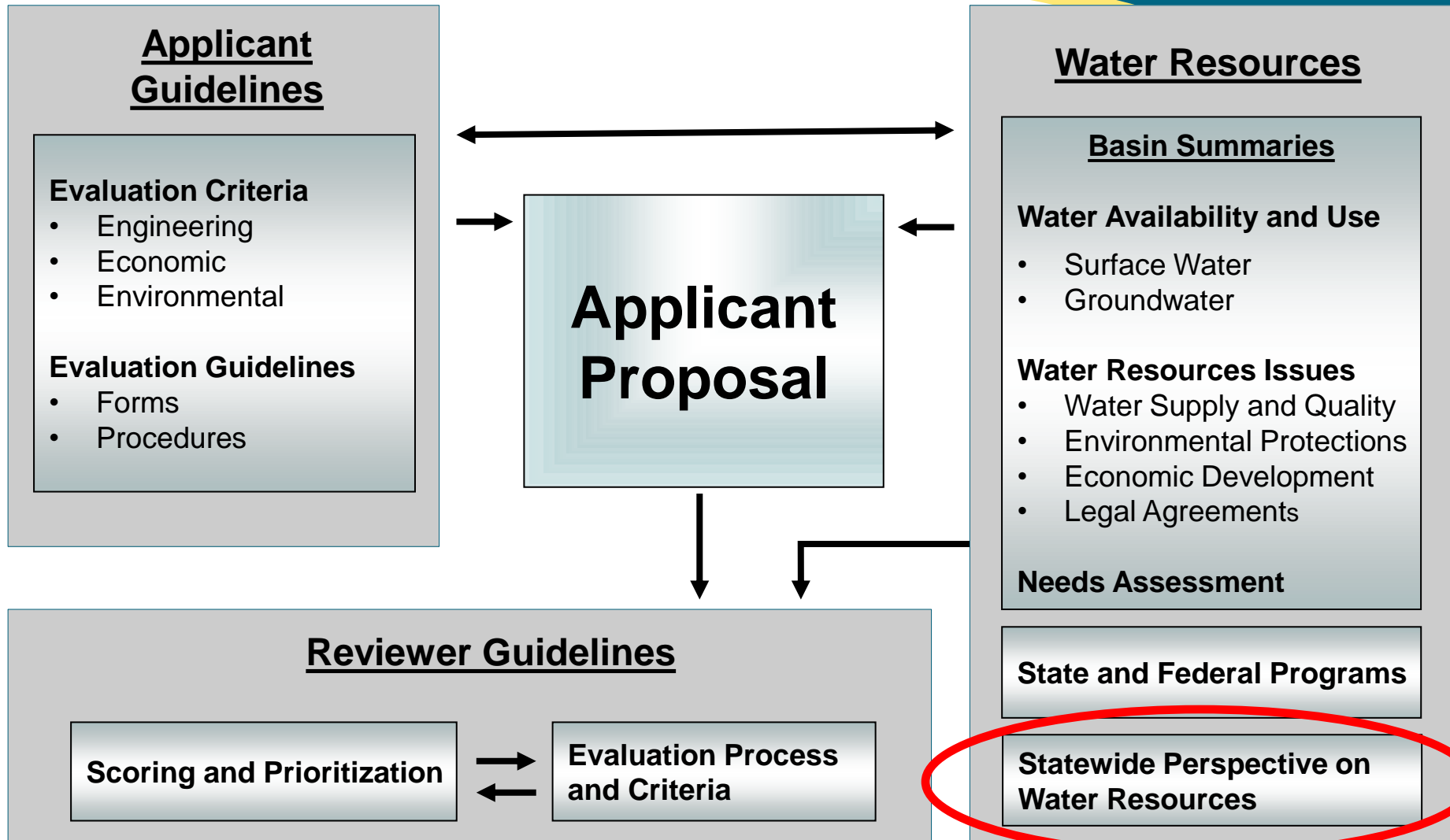
A Two-Phase Application Process Was Selected to Help Focus Applicant Effort

- Phase 1 Application - Feasibility
 - Review general project description
 - Receive input from State and Federal agencies
 - Provide guidance to applicant on project feasibility
 - Apply for Phase 2 funds (seed money)

- Phase 2 Application – Quantitative Ranking
 - Application for design and construction funds
 - Detailed evaluation and scoring by advisory committee for prioritization for Legislature*

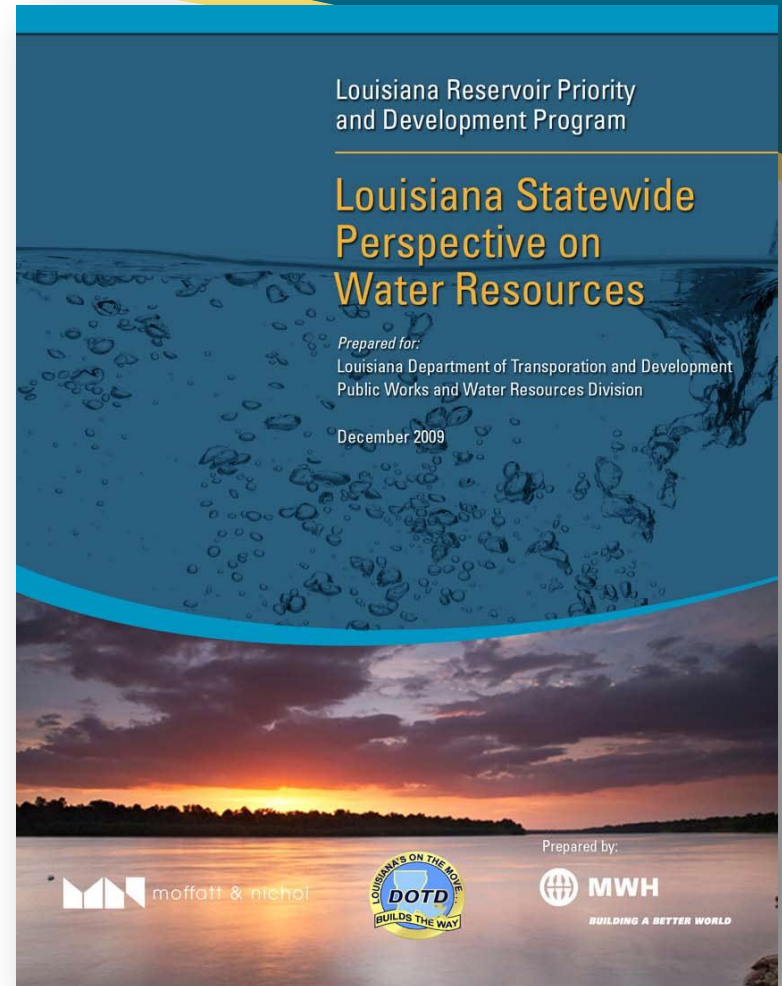
Note: The role of the evaluation committee is prioritization, not selection

Reservoir Priority Development Program Approach



Statewide Perspective on Water Resources

- Summary of water resource issues at a state-wide level
 - Areas of groundwater concern
 - Areas of changing water demand
 - Declining water quality
- Strategies for water resource management



Recommended Water Resources Management Strategies

- Build on existing resources
 - Coordinate activities of state agencies
- Work with local entities for regional solutions
 - Water conservation and education
 - Alternative water sources
 - Intra-basin transfers
- Adopt collaborative vs. regulatory approaches
- Apply scenario-based planning
- Regular updates to needs assessments

Next Steps in RPDP Development

Stage 2 – Outreach and Testing

- Pilot testing of process with sample project
- Input from potential applicants, professional community and other stakeholders
- Presentations to promote the Program
- Workshops to explain the process and provide examples

Next Steps in RPDP Development (cont'd)

Additional Technical Studies

- Estimate sustainable yields of streams, reservoirs and lakes
- Identify potential reservoir locations based on needs and environmental issues
- Quantify stream flood characteristics
- Develop ground and surface water models



RPDP documents are available at:

http://www.dotd.la.gov/intermodal/dams/rpdp_reports.aspx